

Amendment to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A motor housing for an electric motor comprising a housing (10) ~~which defines space (52) to accommodate~~ that accommodates the electric motor, and a flexible partition (50); the flexible partition (50) positioned between the housing (10) and a housing cover (12) and providing a pressure equalizing cavity (54), whereby the pressure equalizing cavity (54) is connected to the outside environment via the housing cover (12) and whereby the flexible partition (50) acts to seal the housing (10) from the outside environment.

2. (Previously Amended) The motor housing according to claim 1, wherein the flexible partition (50) is a membrane.

3. (Previously Amended) The motor housing according to claim 1, wherein at least two openings (56, 58) are formed in the housing cover (12) to connect the pressure equalizing cavity (54) to an outside environment.

4. (Previously Amended) The motor housing according to claim 3, wherein the openings (56, 58) are grooves or holes in the housing cover.

5. (Previously Amended) The motor housing according to claim 1, wherein the flexible partition (50) forms a seal between the housing shell (10) and the housing cover (12).

6. (Previously Amended) The motor housing according to claim 1, wherein the housing cover (12) features means (60) for guiding the flexible partition (50) when the partition (50) is distorted.

7. (Previously Amended) The motor housing according to claim 1, further comprising a cable duct (36) disposed between the housing shell (10) and the housing cover (12).

8. (Previously Amended) The motor housing according to claim 1, wherein the flexible partition (50) further comprises a semi-permeable membrane.

9. (Previously Amended) An electric motor having a stator (16) and a rotor (22) which is enclosed in a motor housing (10) according to claim 1.

10. (Previously presented) The motor housing according to claim 7, wherein the cable duct holds leads (38, 40) for connecting the electric motor and that the flexible partition (50) forms a seal between the cable duct (36) and the housing shell (10) and/or the housing cover (12).

11. (Previously presented) The motor housing according to claim 7, wherein the flexible partition (50) forms a seal between the cable duct (36) and at least one of the housing shell (10) or the housing cover (12).

12. (Currently Amended) A motor housing comprising a first chamber (52) for receiving an electromagnetic rotor and a second chamber (54) for compensating for the temperature changes between the inside of the motor and ambient, wherein the second chamber communicates with the ambient via grooves in the housing cover.

13. (Previously presented) The motor housing of claim 12, wherein the first chamber and the second chamber are separated by a flexible membrane.

14. (Previously presented) The motor housing of claim 13, wherein the flexible membrane is an elastomer.

15. (Previously presented) The motor housing of claim 12, wherein the first chamber is substantially sealed from the ambient.

16. (Previously presented) The motor housing of claim 12, wherein the flexible portion is clamped between the first and the second chambers.

17. (Previously presented) The motor housing of claim 12, wherein the second chamber further comprises at least one opening, the opening providing fluid communication between the second chamber and the ambient.

18. (Previously presented) The motor housing of Claim 12, wherein the second chamber further comprises a guide means for addressing distortion in the flexible membrane.

19. (Cancelled)

20. (Currently Amended) The ~~housing~~ housing assembly of claim ~~19~~ 29, further comprising a guide for restoring the flexible membrane after expansion.

21. (Currently Amended) An electromagnetic motor comprising a housing, a rotor and a stator coupled to the housing;
the housing having a membrane defining a first section (52) and a second section (54),
the first section (52) ~~hermetically sealing the rotor and the stator~~ sealed from an ambient
pressure by the membrane and the second section (54) in fluid communication with the
ambient[[;]],

the housing having a guide (60) adapted to ~~relate the membrane to an original~~
~~shape~~ allow a portion of the membrane to flex.

22. (Previously presented) The electromagnetic motor of claim 21, wherein the membrane expansively deflects in response to a change of temperature in the first section of the housing.

23. (Previously presented) The electromagnetic motor of claim 22, wherein the guide restores the flexible membrane after expansion.

24. (Currently amended) The electromagnetic motor of claim 21, wherein the membrane is interposed between the ~~first~~ first and the second sections.

25. (Previously presented) The electromagnetic motor of claim 21, wherein the membrane sealingly adjoins the first and the second sections.

26. (Currently amended) A method of compensating for temperature changes within an electric motor comprising:

providing a housing defining a chamber for receiving a rotor and a stator;
dividing the chamber into a first section (52) and a second section (54) with a flexible membrane;

hermetically sealing the first section (52) with at least one of the rotor and the stator within a chamber, the chamber having a flexible membrane;

coupling a hub cover to at least partially ~~cover~~ shield the flexible membrane, the hub cover providing a means to communicate pressure in the second section (54) with an ambient environment; and

~~having a guide for reflecting~~ guiding the flexible membrane in a direction responsive to a ~~change in temperature of the chamber~~ temperature difference between the first section (52) and the second section (54).

27. (Previously presented) The method of claim 26, wherein the membrane is an elastomer.

28. (Previously presented) The method of claim 26, further comprising the step of providing means to communicate electricity to the housing.

29. (New) A housing assembly for an electromagnetic motor comprising:
a chamber defined by said housing assembly for receiving a rotor and stator; and
a flexible membrane dividing said chamber into a first portion (52) and a second portion (54),

wherein said first portion (52) is hermetically sealed by said flexible membrane and said second portion (54) is in pressure communication with an ambient pressure, and

wherein said flexible membrane elastically expands in response to a temperature change within said first portion (52).